

# KING HENRY THE EIGHTH

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THIS IS THE 50th occasion upon which the Worshipful Company of Barbers of London and the Surgeons of this Royal College of England have met in concord to hear the Vicary Lecture. Their interests have centred upon those historic occasions in which both have been concerned, and these addresses have been variations upon a theme. They have included biographical studies of some of the great scholars who brought the Renaissance to England and, in particular, they have stressed episodes in the lives of Thomas Vicary and his contemporaries. I shall continue this tradition, and shall dispute before you the health of King Henry VIII. In so doing I shall not condone or justify the cruelties of this great King; these have been amply recorded and they belong to the history of the times. But in judging the Tudors, remember that Belsen is a mark upon the 20th century.

Historians seldom account for the events they describe by referring to the physical disabilities of the principal actors. Writers of romance and fiction have often done this; and have, perhaps, detracted from the merit of this approach by pushing their opinions too far. But there is something in it. Consider, for instance, Napoleon on the eve of Waterloo—too ill to receive Marshal Ney and thus never explaining to him the pivot of his strategy: the crossroads at Quatre Bras.

There are other limitations to the importance of speculations upon medical matters. To be relevant, the diagnosis of the disease under suspicion must be accurate, and even today the diagnosis of many conditions can be proved only by sophisticated laboratory tests. Medical opinions written in the 16th century are not worth the paper they are on; in any event, there are very few about the King. We must also remember that almost everything that happened to important people was coloured in its description by rumour, distortion, and falsification. The most unlikely stories were invented and suited to fear and to political expediency. But now, in the relative safety of our own times, let us turn to our subject.

## The young King

What is the image that this King has left for posterity? We see him, I think, standing four-square and alone. He is altogether above

Thomas Vicary Lecture delivered on 29th October 1970

(Ann. Roy. Coll. Surg. Engl. 1973, vol. 52)

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the citizens of his realm. His countenance and his physique testify to his strength. His clothes, adorned with priceless jewels and fine brocades of gold, indicate taste and the sumptuousness of his Court. The carpet upon which he stands has quality. But, as he looks out from his picture, we cannot but wonder if he cared about the verdict of posterity. Did he guess that his greatness and his guilt would be balanced in the scales of time? 'Sometimes he almost seems to be about to talk to us, and at that moment the light grows dim; the image fades; and we are transported back into the splendid, squalid days of Tudor England.'

In 1509, at the age of 18, Henry VIII came to the throne of England. His prudent father had left him a peaceful realm, a treasury that was full, and an undisputed succession. In 1515 the Venetian ambassador wrote to the Doge in these terms: 'His Majesty is the handsomest potentate I ever set eyes on: above the usual height with an extremely fine calf to his leg, his complexion very fair and bright with auburn hair combed straight and short in the French fashion, and a round face so very beautiful that it would become a pretty woman. . . .' And in another despatch his secretary wrote: 'The like of two such Kings as those of France and England have, I fancy, not been witnessed by any ambassador who has gone out of Venice these fifty years.'

In the paper entitled 'The Historical Background to the Investiture' of the present Prince of Wales this paragraph appears. It is about Henry VIII: 'The prodigy went on to acquire a homely knowledge of empirical medicine, and produced remedies for an aching tooth or a gouty toe with equal confidence, and mercilessly physicked his friends and attendants whenever they complained of the least indisposition. He possessed superior musical talents, and at the age of five took his place in the choir at the Chapel Royal. He performed with skill on the organ, harpsichord, and flute and had his own band of minstrels, singers, and musicians, who were recruited from all over the Kingdom. Later in life he turned to musical composition, and one of the hymns he composed remains a favourite in our cathedrals ("O Lord, the Maker of All Things"), while the haunting air "Greensleeves" is believed to owe its origin to him. He was a passable verse-wright, took part in plays, and delighted in dancing. In addition he was a keen athlete; at wrestling he threw his opponents like nine-pins and invariably bore the prize at tilting, tennis, and archery; very much an all-rounder; a true Renaissance prince.'

Contemporary opinions, seasoned as they were with flattery, do not convey to us a picture of Prince Hal such as would be seen by us today. Nevertheless, Trevelyan supports them to this extent. The King, he says, was 'the glass of fashion and the mould of form'; he en-

couraged and contributed to the lyrical poetry of the day, and the music in the Royal Chapel was, in the words of an Italian visitor, 'more divine than human'.

Professor Scarisbrick casts a shadow across this excellence. He says that Henry grew into a boisterous and noisy young man who revelled in spectacular living. He exulted in his superb physique and spent most of his time in sports, warlike exercises, and in orgies of eating and gambling. He loved to dress up; and his wardrobe, ablaze with cloth of gold, silks, sarcenets, satins, and highly coloured feathers, astounded his visitors. Around his neck he wore a chain of gold from which hung a diamond the size of a walnut, and his fingers were heavy with precious rings.

Henry carried his kingship with absolute conviction; but his abilities and charms could at any moment be marred by anger and shouting. From his earliest days he showed the signs of cruelty that, later on, were to dominate his life. And the tragedy is that he was surrounded not only by scheming politicians who were often playing the game of treason, but by some of the greatest and gentlest scholars of the English Renaissance, many of whom suffered for their wisdom.

Henry died after a reign that had lasted 38 years. For the first 20, or approximately up to the time when he divorced Catherine of Aragon and married Anne Boleyn, his behaviour as a husband was reasonably good. At about the age of 40 his conduct began to be affected by a change in character so that within a few years he became a different person. Wisdom seemed to have left him. And at this very time the state papers and the ambassadors' reports begin to talk about illnesses that occurred with increasing frequency. Such a change has happened so frequently to other princes, such as Tiberius Caesar, that historians scarcely comment upon it. They assume that 'power tends to corrupt, and absolute power corrupts completely' and they are content to record the facts without comment. It is my purpose to speculate about this change in Henry VIII's character and to suggest that there were medical reasons to account for it. And in so doing to say a little about the health of the people and of the practice of medicine in Tudor times.

### **Life and death in Tudor England**

The pattern of disease was very different from today. London was a large industrial city. Its crowded streets were so narrow that, in places, it was possible to reach out from an upper window and touch the hand of a person on the other side. There were no sewers, no running water, no sanitation; indeed it was not until 1562 that the first laws governing the disposal of refuse were passed. Excreta were thrown with other rubbish into the streets, and sewage drained into the ground or stagnated in the gutters. The water supply was foul; it came from the Thames, which was lined upon both banks by filthy

swamps and was itself a gigantic sewer, and from wells dotted about the city. Some of the wells were in private courtyards and some were on the streets, but all were subject to contamination. The streets were not paved, and after rain or during the winter there was mud everywhere. Moreover, since the traffic was drawn by horses and mules, the mud was heavily contaminated with the virulent organisms of tetanus and gas gangrene; all street accidents were dangerous to life. The chief scavengers were rats, crows, and kites; the two latter were protected by law, and walked about as pigeons do today. In the houses there were no carpets, except in the palaces; the floors were covered by matting, reeds, or sand. Soiled matting was rarely replaced, but was covered and trodden in so that the level of the floor rose towards the ceiling. Erasmus, in a letter to Cardinal Wolsey's physican, says, 'The bottom layers are left undisturbed, sometimes for 20 years, harbouring expectorations, vomitus, leakage of dogs and men, all droppings, scraps of fish, and other abominations'. Soap was a luxury used by the few, and most laundry was done using an effusion of cowdung, hemlock, and nettles. Rich people had several houses so that when one became too malodorous they could move to another and be 'sweetened'.

Not one man in a hundred could read or write, and medical books were worth a king's ransom. Nevertheless, in 1469 a Venetian gentleman wrote that the English fed and dressed well and that everybody of substance owned an abundance of gold and silver plate and utensils. 'In one single street named the Strand, there are fifty-two goldsmiths' shops, so rich and full of silver vessels great and small, that in all the shops of Milan, Venice and Florence put together I do not think there would be found so many of magnificence that are to be seen in London. . . .' This great treasure has, except for a few priceless pieces now in the possession of the City Guilds and some churches, entirely disappeared. As the expenses of the French wars and the extravagances of the innumerable pageants drained the royal coffers, the coinage was debased and the silver and gold ornaments were put to more mundane uses.

Side by side with this wealth the wages of the ordinary workers were relatively high and food was cheap; more people died from gluttony than succumbed to the rigours of the climate, the sanitation, or starvation.

We must picture a society of wealth and squalor, magnificence, ignorance, and learning. The risks to life from disease, injury, or war were so high that few people lived to old age. Those who fell ill had to fend for themselves; they were at the mercy of 'doctors' who had little or no medical training and of quacks who preyed upon them. And if one looks at the records of births and infant deaths in the royal households of the Tudors one is horrified to learn that so many died at or soon after birth. The maternal mortality was also appalling.

Most of the diseases that were common were untreatable; they resulted in a mortality that reduced the average expectation of life to half its present span. Pulmonary tuberculosis was 'the captain of the men of death', and contagious fevers, such as measles and smallpox, involved practically everybody. Accidents of all kinds, including severe burns, were common and all open wounds were potentially lethal. The population was often smitten down by epidemics of typhus, cholera, diphtheria, and venereal diseases. Plague and 'sweating sickness' were the two most dreaded and Henry, so brave in battle, used to hurry away in terror whenever they occurred in London. It is strange and puzzling that nobody today can be certain as to what the 'sweating sickness' really was. There were several serious epidemics of this sickness in Tudor times; Colet died from it, Wolsey had more than one attack, and in the epidemic of 1528 more than 40,000 citizens in London succumbed. Twelve members of the royal household were included.

Nor were these the only threats to life. Contamination of food, which could not be stored, and of water resulted in gastroenteritis and typhoid fever, both of which were particularly fatal in infants. Alcoholism was rife; but although Henry was undoubtedly a liberal drinker, the records do not suggest he was a drunkard. Nor did he suffer from gout (which was common) or scurvy which might, in the opinion of some, have caused his 'sorre legges'.

Considering that everybody was exposed to these dangers it is odd that anybody should escape. But a few lived to old age and they must have been indestructible. Henry contracted no serious fevers as a child and in manhood he prospered physically even though he burnt the candle at both ends.

### **The King's doctors**

If we are to discuss the illnesses from which Henry might have suffered, it will be necessary to say a little about his medical advisers because some have confused their classical scholarship with their medical knowledge. Henry VIII was surrounded by men of genius and talent. These scholars included some of his doctors; but they knew little about the diseases they tried to treat. The risks to life of living at Court were not confined to capital punishment, fevers, and food and water poisoning, but included the stock treatments of these learned men—namely, bleeding, purging, and the prescription of horrifying concoctions such as the mithridata that were supposed to counteract poisoning. Medical knowledge was based upon empiricism and mediaeval quackery. Young men aspiring to become doctors learned their trade by apprenticing themselves to older practitioners, and there was much confusion between theology and science. The King's medical advisers devoted far more time to the classics and theology than to the study of medicine.

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A number of Serjeant Surgeons were appointed by the King, and of these Thomas Vicary was the most famous. He served not only Henry VIII, but Edward VI, Mary, and Elizabeth. He was Master of the Barbers Company on four occasions and a surgeon to the Royal Hospital of St. Bartholomew. He it was who received the charter from the King when the Companies of the Surgeons and the Barbers were united in 1540 into one body corporate.

I want to quote a passage from MacNally's Vicary Lecture that reveals the atmosphere of the times. The duties of the royal surgeons included attendance on the torture and maiming of royal prisoners. They must suffer to the full, but not die; and haemorrhage must be controlled. The occasion in question was the day when Sir Edmund Knyvet was to lose his right hand.

'The Serjeant Surgeon came with his instruments; the Serjeant of the Woodyard with mallet and block where the hand was to lie; the King's Master Cook with the knife; the Serjeant of the Larder to set the knife right upon the joint; the Serjeant Farrier with searing irons to sear the blood vessels; the Serjeant of the Poultry with a cock to be killed on the same block with the same knife; the Yeoman of the Chandry with sear cloths; the Yeoman of the Scullery with a pan of fire to heat the irons and a chafer of water to cool the irons; the Serjeant of the Cellar with wine, ale and beer; and the Yeoman of the Ewrie with basin, ewer, and towels.'

As Sir Edmund laid his hand upon the block, the King's pardon arrived, and the assembly went away to their several departments. I have no doubt that, in their robes of office, they would make a modern team of cardiac surgeons look trivial!

The royal doctors worked upon the King under difficulties. They were expected to observe a strict code of rules. They might not talk unless spoken to and, however ill the King became, they dared not treat him without his request. Whole visits were spent in silence. Their lives depended upon their discretion. The protocol of these royal visits was strictly observed until the 19th century. If one compares the facilities for clinical examination and treatment that were available to the physicians, whose very presence in the royal chamber could initiate intrigues abroad, with the daily visits of the royal barber one can appreciate that the latter knew more about what was going on than anybody else at Court.

One of the strangest things about the illness that eventually overcame Henry VIII is that none of the medical men who waited upon him kept records because, in the dangerous political atmosphere of the times, such papers might have laid the doctors open to charges of high treason. When Henry got ill he retired to his private apartments, and little in-

formation reached any but a selected few. The only records that are available are the despatches from the ambassadors and their staffs. These men watched the King's health like lynxes, and every turn was reported to the Pope, to the Kings of France and Spain, and to the Principalities of Venice and Genoa. Their information was pieced together from palace gossip and titbits of news gleaned from any quarter.

### **The King's health**

Let us briefly review the facts that are certain about Henry VIII's health. He was the only member of his family who was robust and healthy from birth. As a young man he suffered a mild attack of smallpox and some trivial fevers from which he soon recovered; he remained fit until about 1530, when he was 39 years old and about to marry Anne Boleyn. Even from then onwards his ailments were slight at first. Throughout the early years of his reign he spent most of his life jousting, hunting, and wrestling by day and revelling by night. His appetite was large and he drank ale, wine, and gin. He would exhaust 10 horses in a day and although he constantly fought in the lists he was never unhorsed until after this time. He was large: his height was 6 foot 2 inches; at the age of 23 his waist measurement was 35 inches and that of his chest was 42 inches. His legs were big and his calves muscular. He was indefatigable; nobody could keep up with him.

His important illnesses date from the year 1536, when he had a serious accident in the lists: he was 44 years old at the time and was to live another 11 years. During this period two other physical abnormalities developed; the first that he became extremely 'corpulent', and the second that from 1537, when he was 45 years old, he began to suffer from 'sorre legges'.

These disabilities steadily worsened until, at the time of his death, he was a wreck. But, except for short periods when nobody was admitted to his chamber, he remained active and was only confined by the severe pain in his leg and by repeated bouts of fever. In 1544, shortly before he died, he insisted, against everybody's advice, on crossing the Channel and joining his army in France. During the time he was there he spent long hours in the saddle and made regular visits to the encampments and fortifications. When he returned to England in October 1544—that is, 13 months before he died—he was unwell; but he continued with his outdoor sports and insisted that his health was good. During the last months of 1545 he moved almost daily from one house to another as though he sensed his doom. And in this restlessness, reminiscent of an animal about to die, he insisted that his Court and Council, comprising several thousand persons, should travel with him.

It is possible that the fevers from which he suffered were due to malaria, but it is more probable that they were the result of inflamma-

tion in his leg. This guess gains support from the reports that Vicary was able, on several occasions, to open an abscess and cut short the pain and swelling.

There seems to be little doubt that within the criteria of the times Henry was a healthy and attractive young man. There is also ample evidence that, towards the end of his life, there were increasingly frequent periods when, in character and behaviour, he seemed to be demented. Moreover, his 'corpulence' made it difficult for him to move about, and as he became progressively more limited in his activities he was beset by gloom and fits of temper. These character changes are thought by some to have occurred relatively suddenly and to have been associated with the disease that ultimately overcame him.

Be these speculations as they may, we should note that Henry never ceased to govern the realm, nor was he outwitted by the cunning machinations of some of his councillors. On Christmas Eve 1545, one year before the end and at a time when many thought he was already dying, he went to the Parliament house and delivered the speech of prorogation in person. This was normally the work of the Chancellor. He gave a long oration that began as an address of thanks to his loving subjects and ended as a sermon upon charity. He severely reprimanded those in the Chamber because the Scriptures were not being properly explained to the laity, and he appealed for charity and godly unity. The fact that he himself had long since given up these virtues did not astonish his listeners. The King was above dispute.

A point about his decline in health is that he was seldom out of action for long and, until the last months of his life, he repeatedly confounded those who felt confident that he was about to die. So accustomed were his courtiers to this resilience that when the end was really at hand nobody was sure about it, and nobody could be found to tell him that time was short if he wished to confess. His confessor arrived when he could no longer speak.

### **Syphilis—an unlikely diagnosis**

If we are to speculate about the scanty medical details that are available, the object should be to ascertain if the illnesses that undoubtedly killed the King and the various symptoms they produced can be linked under the cloak of a single diagnosis. Professional historians have assumed that Henry acquired syphilis as a young man, transmitted it to several of his wives, and died with syphilitic ulcers upon his legs and general paralysis of the insane. These assumptions are reasonable but incapable of proof; they are not the only possible explanation of the scanty available facts, and it is to enlarge upon this point that I propose to 'draw a bow at a venture'.



Before doing this, I must underline once again that, even today, the diagnosis of syphilis is often doubtful; and 200 years after Henry had died John Hunter was so confused as to the differences between syphilis and gonorrhoea that he infected himself to prove that they were the same disease. But returning to the early years of Henry's reign, we should take note that a major epidemic of syphilis had occurred between 1490 and 1500 and had spread throughout Europe. The disease must have been of particular virulence; it attacked an unprotected population, and caused panic in many parts of Europe. Syphilis seldom kills people today in its early stages; but even during the last century it was not unusual for patients to die in the secondary stage from septicaemia or meningitis. It could also cause acute necrosis of the liver, nephritis, and myocarditis.

Discussions as to whether it was brought to Europe by Christopher Columbus and his sailors, who had contracted it in Hispaniola—that is, the island of Haiti—are irrelevant to our purpose. Contemporary writers such as Ruiz Diaz believed that the European epidemic started in Barcelona in 1493, and Fallopius wrote: 'Columbus discovered a continent and many isles with treasures of gold and silver. But amongst the precious metals was hidden a thorn, and aloes in the honey. . . .'

Nobody in the Tudor world would have known enough about the disease to recognize anything but the primary and early secondary lesions. The abnormalities that kill today occur so long after the primary venereal episodes that only serology can prove the connection. Nor would doctors have known that an expectant mother can transmit the disease to her unborn child. And so, although historians may ascribe the stillbirths and miscarriages suffered by Catherine of Aragon and Anne Boleyn to congenital syphilis, the idea would never have occurred to Henry or to his contemporaries. It is true that congenital syphilis increases the risks to birth and survival in infancy; but this disease is not alone in these respects. Long before syphilis came to England the dangers of childbirth to mother and child from other causes were enormous. Moreover, in congenital syphilis there is a pattern that occurs by which a mother produces several dead infants before one survives; and Elizabeth was the first-born of Anne Boleyn.

Pursuing the evidence against the idea that Henry's troubles were due to syphilis, we can be pretty certain that he himself did not acquire the disease from his wives or his mistresses. It is probable that, apart from Catherine Howard, who was beheaded on this account, his wives (with the possible exception of Anne Boleyn, who had spent some time at the French Court) were virgins. And as to his mistresses, we have the well-informed despatches of the foreign ambassadors, whose chief duty at Court was to acquaint their European masters as to the probabilities of the English succession. These shrewd courtiers have recorded that,

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until after the death of Jane Seymour, he was a reasonably faithful husband. The year after his marriage to Catherine of Aragon his eye fell upon the young married sister of the Duke of Buckingham, but his wife objected and the lady was spirited away to a convent. Then there was Elizabeth Blount, who was the mother of Henry's first-born; the child became the Duke of Richmond and died as a young man, probably from pulmonary tuberculosis. And finally there was Mary Boleyn, who was Anne's elder sister. Henry had four children, three of whom survived him, and none of the latter had the stigmata or subsequent histories of congenital syphilis.

But the most telling evidence against syphilis is that at the time primary and secondary syphilis were regarded as dangerous and dreadful scourges. They were classed, with the plague and the 'sweating sickness', as infectious diseases that carried a high mortality and morbidity. Nobody, not even the King himself, could have gone untreated. It so happened that in the year 1495 an Italian called Frascatore had stumbled upon the knowledge that mercury could often be used with good effect. This metal, that is a powerful poison in itself, could be administered by inunction (the usual way), by inhalation of vapour, or by drinking a variety of concoctions. In the treatment of syphilis mercury was prescribed in sufficient quantities to kill the organism and not quite to kill the patient. It was a nice test of therapeutic skill, and the dose was controlled in a simple way. Mercury poisoning produces excessive salivation, and the patient was treated until he was spitting up between two and three pints of saliva a day. At St. Thomas's Hospital there were wards devoted to the treatment of 'foul pox' and they were called the 'salivation wards'. Appropriate jugs were provided and only when these were filled with saliva would the regimen be relaxed. A 'curative course' lasted about two months. It was believed that the foul humours were excreted in the saliva. We can assume that the ambassadors would not have missed the signs if Henry had been treated in this way.

There is one more piece of information in the case against syphilis. At the time of Henry's death he was neither paralysed nor insane. It is true that he could not move about easily and had to be carried from room to room in a chair; but this was because he was so heavy that his painful legs could not carry him unaided.

### The King's injuries

There is another possible explanation of the infirmities that transformed this healthy and athletic man and made him a complete physical wreck. It is that during the last 10 years of his life he suffered acutely from the cumulative effects of the many injuries that he had received in his warlike exercises; it is this idea that I want to develop.

Henry was always popular with the common people and this was

partly due to the frequent and spectacular pageants that he provided for their entertainment. These included tournaments, jousts, hand-to-hand combats, wrestling, and archery. The tournaments were conflicts between groups of knights engaged simultaneously, while jousts were man-to-man battles which, in Henry's day, were fought in the lists. Tournaments and jousts were often combined and were serious matters.

Combats between armed men had survived in England since the days of the Crusades; but with the passage of time their object and regulation changed. At first they were a specialized part of the art of war. Later, in tourneys, gentlemen and their supporters fought on horseback with weapons of their choice, and plebeians on foot with quarter-staffs. The pitch was enclosed, and the issue was often carried to a conclusion. The loser might be stripped of his armour and decapitated.

In the 15th century, and particularly during the recurring wars between England and France, the rules of conduct became more strict, but the result to the participants was often death to the vanquished. We read of one occasion, in Normandy, in which a truce was called and a champion was selected from each army. The champions had 20 knights each to support them, and after they had killed each other—one principal had fought with a heavy leaden mallet and the other with a large double-edged billhook—the seconds joined issue and at the end there were only two left in their saddles. The contest was declared a victory for England and the war was resumed.

As time passed 'the tournament proper, the combat of many against many, the *mêlée* in which the knight liked to see the image of battle itself, had developed into something relatively tame. From an engagement in the field, all but devoid of restrictions and rules, differing from war only in that it was supposedly fought for the love of it rather than for animosity to the opposing side . . . it had become little more than a spectacle.' 'As a military force the belted knight had passed away, driven from his monopoly of the military profession by the yeoman archer, gunpowder, and the professional captain.'

In Henry's day jousting had become an expensive and colourful public entertainment, and tiltyards were a feature of large private houses and palaces. Upon appointed days the tiltyards were decorated with flags, pennants, and tapestries. The audience consisted of nobles and gentry, in their finest robes, and the rabble, herded together in enclosures. The contestants, their seconds, and their supporters wore costly and elaborate armour, and the procedure was supervised by heralds, trumpeters, and marshals who wore the elaborate clothes we see on state occasions today.

A strong, solid, wooden fence or palisade ran from one end of the yard to the other. Its purpose was to prevent the contestants coming into head-on collision or manhandling each other and its presence

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meant that long lances had to be used to strike an opponent on the other side of the barrier. To unhorse a rival it was necessary not only to get the greatest possible speed from the horse, but to keep it close to the barrier. Each knight carried a lance or spear in his right hand and directed it towards his adversary obliquely across the tilt. The lances were strong spars of wood about 15 feet long and tipped with metal. If a direct contact was scored, they were apt to splinter. In Henry's day the knights wore full armour that encased their bodies, and the horses were also protected.

In jousting there were various ways of scoring. The first was to strike the armour of the opponent with such force that the lance splintered; the second to unhorse him by the force of the impact; once unhorsed, the knight could only lie upon the ground until retainers rolled him over and released him from his armour. Although the butchery of mediaeval battles had been eliminated from tourneys the exercises—namely, the *mêlée*, hand-to-hand encounters, and joustings—were dangerous. It was not unusual for hundreds of lances to be shattered in one tournament and for the knights or their horses to be killed.

Apart from the glamour and the colour of these spectacles, the cult of Chivalry, which dominated every detail of the proceedings, had become more than a set of rules governing a sport. Chivalry was the accepted code of ethics and the rules of behaviour that bound all who aspired to be gentlemen; fighting in the lists was their proving ground. Henry was not prepared to have any young aristocrats about him who had not shown their mettle in this way.

The duties of the heralds who watched over the whole field of Chivalry were elaborate. Here, for instance, are the rules for the degradation of a knight convicted of dishonourable conduct: 'The culprit is exposed upon a scaffold, clad only in his shirt; his armour is broken in pieces before him and thrown at his feet. His spurs are cast upon a dunghill. His shield is dragged by a carhorse through the mire and the tail of his destrier is cut off. The Herald at Arms cries three times, "Who is there?" and each time the name of the knight is given. The Herald then cries, "No, it is not so. I see no knight but only a false coward." The culprit is then borne upon a litter to a church where the burial service is read and the world of Chivalry knows him no more.'

Henry was a traditionalist in these matters. Not only did he set up his own factory for making armour at Greenwich, but, at the very time when his contemporaries were building their houses in the new style of the Tudors, he built Nonsuch Palace. This place, with its battlements, turrets, bridges, massive gates, and enclosed courtyards, was a relic of the past. It was destined never to be occupied by royalty. It was not completed until Henry was at the end of his life, and his

successors found it obsolete. It was occupied for a number of years by caretakers and it was pulled down in 1682. A property developer used the stonework to build Soho.

People in the western world knew that the King of England was an exceptional athlete. For the first 20 years of his reign, when the responsibilities of government were carried by Cardinal Wolsey, he had time to pursue his personal interests; and these centred upon all manner of field sports by day and revelry by night. It was usual for Henry to out-ride all his companions in the long chases of a single day; and these strenuous exercises were in addition to hawking, wrestling, fighting on foot with the two-handed sword, and archery. And throughout the greater part of his reign he fought in the lists on all available occasions. These man-to-man contests brought him into contact with many expert adversaries and 'no holds were barred'. The records tell us that for many years he was never unhorsed, but throughout his life he must have endured innumerable injuries.

Much of his armour is preserved in the Tower of London. It was designed for jousting: the breastplate, for instance, was sometimes angled in the front to deflect direct strikes; it was heavy and complete. Only a very strong man could have moved in it. His horse had to be capable of carrying more than 45 stone, and when, during the 19th century, some attempts were made to revive jousting in the lists, the enterprise failed because nobody could control the horses.

The first accounts of Henry's prowess in the lists are descriptions of the pageants and tournaments that occurred at the time of his wedding to Catherine of Aragon. But throughout his youth he had practised continuously. The first occasion upon which he entered the lists as King was 12th January 1510. He took part incognito with Sir William Compton, a Gentleman of the Privy Chamber, in a private joust at Richmond. Compton was almost killed, but both the 'strangers' won the applause of the crowd for their skill. After this the King issued a standing challenge to all comers on horse or foot.

Later there are records of the events at the Field of the Cloth of Gold. This lavish spectacle was the result of defiances sent by Henry and Francis of France to each other's Courts importing that each King, supported by 14 aides, would be ready in the plains of Picardy to answer all comers, that were gentlemen, at tilt and tourney. The affair involved immense preparations, and from the painting of Henry and his entourage arriving upon the scene it is apparent that the pavilions alone occupied a large territory. The tournaments lasted about four weeks and Henry is said to have taken part on all possible occasions. He unhorsed a number of the French knights, but he met his match in Monsieur de Montmorency. Moreover, the young King of France defeated him at wrestling.

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In March 1524, when Henry was 32 years old, he challenged the Duke of Suffolk to combat. Heavy armour was specially made for the occasion and he rode a horse that nobody but he could handle. Henry and the Duke of Suffolk were experts; they scored in one way or another on every course and the damage, given and received, was considerable. On this occasion it was noticed by the spectators as soon as the horses had started galloping towards each other that Henry had forgotten to close the visor in his helm. It was too late to stop, and the two knights came into violent impact. The Duke of Suffolk had directed his lance at the King's helm, and the point entered it between the face and the metal. It broke, and splinters remained inside, injuring the King's head. The King was unhorsed and stunned for some time; but to prove his stamina he rode six more courses upon the same day and continued jousting, without interruption, in the week that followed.

In 1525, at the age of 33, he had a second serious accident. On this occasion he was hawking and had vaulted a hedge using a long pole that broke under his weight. It so happened that on the far side of the hedge there was a ditch full of water with banks of clay. The King fell head first into the ditch and with his head under water he found himself stuck in the clay. His life was saved by a retainer called Edmund Mody who pulled him out feet first.

The third accident was the most serious. In 1536, at the age of 44, Henry was jousting at Greenwich. His opponent remains unknown, but he was obviously skilful because the two knights struck and unhorsed each other simultaneously and both fell to the ground. The plight of the King was serious because his horse, carrying full armour, rolled upon him, and it was some time before he could be extracted. Some thought he was dead and on the following day Anne Boleyn, who had witnessed the affair, was delivered of a dead child. It was a boy. This was the last occasion upon which Henry fought in the lists. Perhaps he had done so once too often.

### The King's illnesses

From that fateful day his health deteriorated, so that although he often said that he was 'marvellously well', he began to suffer from a variety of ailments, including severe headaches, periods of melancholy, and anger. In the following year—that is, in 1537—an 'inflammation' developed in his leg and from then onwards he was in constant trouble on this account. These illnesses could have been caused by his accidents. Repeated head injuries resulting in concussion such as that sustained by professional boxers can lead to being 'punch drunk'. This is accepted by neurologists as a pathological condition. In an editorial in the *Lancet* the final picture was painted in these words: '... with repetition of injury inevitable in the confirmed boxer, together with the effects of age,

it may only be a matter of time before progressive deterioration or cerebral function becomes obvious. The characteristic history of repeated battering, at first with no after-effects, but later with progressive blunting of everything that matters most in the human mind, and the final mental wreck, has been established beyond doubt.' In a report from the Royal College of Physicians the conclusion was reached that the onset of warning symptoms is often so insidious that neither the victim nor his friends are aware of what is happening until it is too late. Several case histories were quoted and, in some, uncontrollable attacks of anger were prominent.

The end result of repeated head injuries is impossible to predict and it is always difficult to be certain as to cause and effect. But character changes are a part of the picture. The victim may become aggressive, rough or gentle, hesitant or deliberate, but he is never wiser than he was before the brain was injured. Two other points are relevant to this post-traumatic syndrome. The more intelligent a man is, the more susceptible his brain is to injuries; and the older he gets the more the harmful effects can become relevant.

One feature of the illness that killed the King was a change for the worse in his character. His fits of anger and cruelty were intermittent. In the intervals he was more than competent to conduct the interminable negotiations with his rivals on the Continent, as well as keeping a shrewd eye on the members of his Council. These faculties remained until the end, and MacNalty tells us that a few days before he died he summoned the ambassadors of Germany, Genoa, and France to discuss fortifications and military strategy abroad. The ambassadors came away from these interviews convinced that, far from dying, the King was in health. It is difficult to believe that a man dying from general paralysis of the insane would have deceived these observant spies.

During the last 10 years of his reign the King undoubtedly put on a great deal of weight. We can be certain from the armour he wore that his waist measurement increased by at least 20 inches between 1514 and 1541, and before he died matters were worse. In the last year of his life he could not move without support, and special appliances were made to carry him from place to place.

### **Diagnostic speculation**

These changes have been attributed to obesity caused by overeating and alcohol. But against this there are arguments to suggest another reason. It is unlikely that a man dying from a painful disease, with bouts of fever and suppuration, would have continued to gorge himself with food.

I shall suggest that perhaps the diagnosis, instead of 'obesity', should be 'amyloid disease'. This condition was common in Henry's day be-

#### KING HENRY THE EIGHTH

cause it is a complication of syphilis, tuberculosis, and all forms of chronic pyogenic suppuration. It is a condition that relentlessly destroys certain essential abdominal viscera, and notably the kidneys, which become unable to carry out their excretory functions. Thus the patient becomes dropsical (nephrotic syndrome) and his weight increases—not because he has added fat, but because he stores water. The drawings of the King made a few years before his death have the facies of dropsy.

And this suggestion leads us to enquire as to why he could have had amyloid disease. In 1537—that is, 10 years before he died—he began, while travelling upon one of his regular ‘progresses’ throughout the realm, to suffer from ‘sorre legges’. It was upon this occasion that Vicary was called to treat him. Since the chronicles of the times and the ambassadors’ letters refer to this important episode in only the vaguest terms, we do not know whether both legs were affected, nor the sites of the lesions. But from the subsequent march of events I deduce that the trouble started deeply in the thigh, became extremely painful, formed an abscess upon the surface, and discharged pus. After this the symptoms were relieved and the open sore healed. But thereafter the inflammation recurred on several occasions, and each time the sequence of events was the same.

It is interesting, from the point of view of diagnosis, to speculate about what part of the King’s leg was involved. For those who have said that the leg lesion was syphilitic the probability would be that the sores were gummatous ulcers situated below the knee. Syphilis rarely attacks the thigh and no orthopaedic surgeon whom I have consulted has seen a gumma starting in the lower end of the femur.

Another suggested diagnosis has been varicose ulcers. These can be painful, but they are nearly always situated in the lower part of the leg; they do not form abscesses that could be treated by cauterization—as happened to Henry—nor are they usually associated with repeated episodes of fever. The ambassadors never saw the actual lesions because they did not describe them, and this could suggest that it was the thigh that was involved.

Let us consider the picture of Henry that hangs at the end of the Edward Lumley Hall. It was painted in part by Holbein in 1540—that is, three years after the troubles in the leg had started and at a time when they were crippling the King. We must make due allowance for the fact that Holbein might have painted the King as he would have wished to look rather than as he actually was, for this is what Holbein did when he was sent by Henry to the Low Countries to paint the portraits of a number of young women whom Henry was considering as possible brides. Returning to the Holbein painting, we note that the left leg is uncovered and looks normal; the foot is not swollen and there are no dressings. On the other hand the right thigh is covered by the mantle of gold brocade,



leaving the right leg below the knee exposed. The leg below the knee looks to be of normal shape and size; and this would suggest that the 'sore' was in the right thigh. The significance of this is that, if it were so, the cause of the leg trouble could have been chronic osteomyelitis affecting the lower end of the right femur, and perhaps that is why that part of the leg is covered in the picture.

Osteomyelitis is a disease that was common in the pre-antibiotic era. *It is caused in most cases by injury* to the end of one of the long limb bones. The bruised bone becomes infected by a pyogenic organism circulating in the blood, and a part of the bone dies and becomes a sequestrum. This, in its turn, causes a painful abscess from which the pus tracks towards the surface and eventually discharges through a sinus. It is characteristic of chronic osteomyelitis that it causes recurrent episodes of illness with fever, pain, and debility. It is also a cause of amyloid disease leading to oedema. In Henry's day it would have been incurable.

Thus it is perhaps reasonable to postulate that Henry eventually died from the cumulative effects of the many injuries he must have received throughout his life. These could have produced not only progressive deterioration in his mental faculties, but headaches, fits of anger, fevers, 'corpulence', and sore legs.

I began by warning you that these medical speculations are no more than guesses; but they underline the fact that much that has been accepted as fact may not be so; and they indicate that, despite the state papers and such other official records as remain, the full story of this reign can never be known. Historians emphasize the athletic prowess and the robust health of the young King; but they do not weigh the crippling and painful illness that overshadowed the autumn of his life. Nor do they allow that for him, who feared the intricacies of Tudor medicine more than the dangers of mortal combat, his infirmities must have seemed worse than death. For the last 10 years of his life, when the affairs of State and Church were in his hands alone, he was slowly and inexorably destroyed. And here is Goldsmith's description of the end: 'The disorder in his leg was now grown extraordinarily painful; and this, added to his monstrous corpulence which rendered him unable to stir, made him more furious than a chained lion. . . . His anguish and his remorse were, at this time, greater than can be expressed.'

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## COLLEGE EVENING

THE NEXT 'COLLEGE EVENING' (Advanced Discussion Groups for Consultants and Senior Registrars) will be held at the College on Monday 4th June 1973 at 6.00 p.m.

The subject will be 'The injured chest', and the Chairman will be Professor A. J. Harding Rains. The proceedings will include papers on 'Chest wall injuries and stabilization' by Mr. M. Meredith Brown (St. Helier and Milford Hospitals) and Mr. Bryan Moore (Brook General Hospital); 'The great vessels' by Mr. Gerald Keen (United Bristol Hospitals); 'Gunshot wounds of the chest' by Mr. Morris Stevenson (Royal Victoria Infirmary, Belfast); 'IPPV' by Mr. Donald Campbell (Glasgow Royal Infirmary); and 'Pain in relation to chest injuries' by Mr. John Lloyd (Radcliffe Infirmary, Oxford).

Buffet Supper 7.30. Discussion 8.30-9.30.

Applications to Mr. W. Webber, Administrative Assistant, Royal College of Surgeons.

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## COLLEGE DINNER—9TH MAY 1973

THE COLLEGE DINNER on Wednesday 9th May will be followed by a short musical programme by the Arriaga String Quartet, with music by Haydn, Beethoven, Dvorak, and Borodin.

Applications for tickets for the Dinner, price £3.50 including cocktails and wines at table, should reach Mr. W. F. Davis at the College by 2nd May.